

MASTERBATCH

MASTERBATCH CA-P12

PP CALCIUM CARBONATE FILLER MASTERBATCH

This filler masterbatch combines finely ground calcium carbonate with a polypropylene carrier resin and processing additives, formulated as a general-purpose grade for polypropylene conversion. High whiteness, uniform dispersion of the mineral filler, and good compatibility with the base resin allow it to replace a portion of virgin polymer while improving hardness, surface finish, heat resistance, and the physical and chemical durability of the finished part.

Typical Application

- PP woven sacks and FIBC (flexible intermediate bulk containers) at 15-25% loading
- PP injection molding and blow molding at 5-30% loading
- PP non-woven bags and spunbond fabric
- Extrusion of pipe, profile, and general PP articles

Product Characteristics

- High whiteness with excellent calcium carbonate dispersion and resin compatibility
- Improves hardness, surface finish, heat resistance, and physical/chemical durability of finished parts
- Cost-saving replacement of virgin polyolefin resin without loss of processability
- Uniform 2-3 mm granule for consistent metering and blending

Physical Properties

Properties	Test Method	Typical Value	Unit
Carrier Resin + Additives		~40	%
Calcium Carbonate Content		60	%
Calcium Carbonate Particle Size (Malvern Mastersizer 2000)		1-3	µm
Melt Flow (230°C/2.16kg)	ASTM D1238	12-18	g/10 min
Moisture Content	ASTM D644	< 0.12	%
Density		1.6-1.9	g/cm ³
Granule Size		2-3	mm

1. Melt flow, moisture, granule, and physical density are per the producer's published family data for PP calcium carbonate filler masterbatch (melt flow shown is the grade-specific typical figure; family range 5-40 g/10 min at 230°C/2.16kg); calcium carbonate content is this grade's specific typical loading (60%), which runs lower than the family table's general 70-85% band. Grade-specific certificate of analysis supplied per lot at order.

2. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.